

(h) Capital Reorganization, Merger or Sale of Assets. If at any time or from time to time there shall be a capital reorganization of the Common Stock (other than a subdivision, combination, recapitalization, reclassification or exchange of shares provided for elsewhere in this Section 5) or a merger or consolidation of the Corporation with or into another corporation other than a merger or reorganization involving only a change in the state of incorporation of the Corporation or the acquisition by the Corporation of another business where the Corporation survives as a going concern, or the sale of all or substantially all of the Corporation's capital stock or assets to any other person, then, as a part of such reorganization, merger, or consolidation or sale, provision shall be made so that the holders of the Series B Convertible Preferred Stock shall thereafter be entitled to receive upon conversion of the Series B Convertible Preferred Stock the per share kind and amount of consideration received or receivable (including cash) upon such merger, consolidation or sale, to which such holder would have been entitled if such holder had converted its shares of Series B Convertible Preferred Stock immediately prior to such capital reorganization, merger, consolidation or sale. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 5 to the end that the provisions of this Section 5 (including adjustment of the Series B Applicable Conversion Value then in effect and the number of shares of Common Stock or other securities issuable upon conversion of such shares of Series B Convertible Preferred Stock) shall be applicable after that event in as nearly equivalent a manner as may be practicable.

(i) Certificate as to Adjustments; Notice by Corporation. In each case of an adjustment or readjustment of the Series B Applicable Conversion Rate, the Corporation at its expense will furnish each holder of Series B Convertible Preferred Stock with a certificate prepared by the Treasurer or Chief Financial Officer of the Corporation, showing such adjustment or readjustment, and stating in detail the facts upon which such adjustment or readjustment is based.

(j) Exercise of Conversion Privilege. To exercise its conversion privilege, a holder of Series B Convertible Preferred Stock shall surrender the certificate or certificates representing the shares being converted to the Corporation at its principal office, and shall give written notice to the Corporation at that office that such holder elects to convert such shares. Such notice shall also state the name or names (with address or addresses) in which the certificate or certificates for shares of Common Stock issuable upon such conversion shall be issued. The certificate or certificates for shares of Series B Convertible Preferred Stock surrendered for conversion shall be accompanied by proper assignment thereof to the Corporation or in blank. The date when such written notice is received by the Corporation, together with the certificate or certificates representing the shares of Series B Convertible Preferred Stock being converted, shall be the "Conversion Date". As promptly as practicable after the Conversion Date, the Corporation shall issue and shall deliver to the holder of the shares of Series B Convertible Preferred Stock being converted, or another person on its written order, such certificate or certificates as it may request for the number of whole shares of Common Stock issuable upon the conversion of such shares of Series B Convertible Preferred Stock in accordance with the provisions of this Section 5, and cash, as provided in Section 5(k), in respect of any fraction of a share of Common Stock issuable upon such conversion. Such conversion shall be deemed to have been effected immediately prior to the close of business on the Conversion Date, and at such time the rights of the holder as holder of the converted shares of Series B Convertible Preferred Stock shall cease and the person(s) in whose name(s) any

certificate(s) for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares of Common Stock represented thereby.

(k) Cash In Lieu of Fractional Shares. No fractional shares of Common Stock or scrip representing fractional shares shall be issued upon the conversion of shares of Series B Convertible Preferred Stock. Instead of any fractional shares of Common Stock which would otherwise be issuable upon conversion of Series B Convertible Preferred Stock, the Corporation shall pay to the holder of the shares of Series B Convertible Preferred Stock which were converted a cash adjustment in respect of such fractional shares in an amount equal to the same fraction of the market price per share of the Common Stock (as determined in a reasonable manner prescribed by the Board of Directors) at the close of business on the Conversion Date. The determination as to whether or not any fractional shares of Series B Convertible Preferred Stock shall be rounded up shall be made with respect to the aggregate number of shares of Series B Convertible Preferred Stock being converted at any one time by any holder thereof, not with respect to each share of Series B Convertible Preferred Stock being converted.

(l) Partial Conversion. In the event some but not all of the shares of Series B Convertible Preferred Stock represented by a certificate(s) surrendered by a holder are converted, the Corporation shall execute and deliver to or on the order of the holder, at the expense of the Corporation, a new certificate representing the number of shares of Series B Convertible Preferred Stock which were not converted.

(m) Reservation of Common Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series B Convertible Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series B Convertible Preferred Stock (including any shares of Series B Convertible Preferred Stock represented by any warrants, options, subscription or purchase rights for Series B Convertible Preferred Stock), and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series B Convertible Preferred Stock (including any shares of Series B Convertible Preferred Stock represented by any warrants, options, subscriptions or purchase rights for such Preferred Stock), the Corporation shall take such action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(n) No Reissuance of Preferred Stock. No share or shares of Series B Convertible Preferred Stock acquired by the Corporation by reason of [redemption,] purchase, conversion or otherwise shall be reissued, and all such shares shall be cancelled, retired and eliminated from the shares which the Corporation shall be authorized to issue. The Corporation shall from time to time take such appropriate corporate action as may be necessary to reduce the authorized number of shares of the Series B Convertible Preferred Stock.

6. Redemption. The Series B Convertible Preferred Stock is not redeemable.

7. Restrictions and Limitations.

(a) Corporate Action; Amendment. At any time when shares of Series B Convertible Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of the Corporation is required by law or this Certificate of Incorporation, and in addition to any other vote required by law, without the written consent of the holders of at least a majority of the then outstanding Series B Convertible Preferred Stock (with each share being entitled to one vote) given in writing or by vote at a meeting consenting or voting (as applicable) separately as a series, the Corporation will not amend its Certificate of Incorporation or by-laws if such amendment would materially adversely affect any of the rights, preferences, privileges or limitations provided for herein of any shares of Series B Convertible Preferred Stock. Without limiting the generality of the foregoing, the Corporation will not amend its Certificate of Incorporation or by-laws without the approval of at least a majority of the then outstanding shares of Series B Convertible Preferred Stock to:

(i) cause the Corporation to redeem, repurchase or otherwise acquire for value (or pay into or set aside for a sinking fund for such purpose), any share or shares of Common Stock other than a redemption, repurchase or other acquisition for cash of unvested shares under the forfeiture provisions of the Corporation's stock option, restricted stock or other equity compensation plans or agreements or any shares of Series B Convertible Preferred Stock which is offered pro rata to all holders thereof; or

(ii) authorize or issue, or obligate the Corporation to authorize or issue, additional shares of Preferred Stock senior to the Series B Convertible Preferred Stock with respect to liquidation preferences, dividend rights, voting rights or redemption rights; or

(iii) increase or decrease (except retirement following conversion) the authorized number of shares of Series B Convertible Preferred Stock or reissue shares of Series B Convertible Preferred Stock previously converted; or

(iv) adversely affect the liquidation preferences, dividend right or voting rights of the holders of Series B Convertible Preferred Stock; or

(v) pay any dividends on the Common Stock at a time when any shares of Series B Convertible Preferred Stock is still outstanding.

8. No Dilution or Impairment. The Corporation will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of capital stock or assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Series B Convertible Preferred Stock set forth herein, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holders of the Series B Convertible Preferred Stock against dilution or other impairment.

9. Notices of Record Date. In the event of:

(a) any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any

shares of capital stock of any class or any other securities or property, or to receive any other right, or

(b) any capital reorganization of the Corporation, any reclassification or recapitalization of the capital stock of the Corporation, any merger or consolidation of the Corporation, or any transfer of all or substantially all of the assets of the Corporation to any other corporation, or any other entity or person, or

(c) any voluntary or involuntary dissolution, liquidation or winding up of the Corporation,

then and in each such event the Corporation shall mail or cause to be mailed to each holder of Series B Convertible Preferred Stock a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right and a description of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding up is expected to become effective, and (iii) the time, if any, that is to be fixed, as to when the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding up. Such notice shall be mailed by first class mail, postage prepaid, at least one (1) days prior to the date specified in such notice on which such action is to be taken.

10. Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of Series B Convertible Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Series B Convertible Preferred Stock that is being converted.

D. Description of Series C Convertible Preferred Stock. All of the rights, preferences and privileges granted to or imposed on the Series C Convertible Preferred Stock and the holders thereof are as follows:

1. Designation. A total of 1,476,720 shares of the Corporation's Preferred Stock shall be designated the "Series C Convertible Preferred Stock". As used herein, the term "Preferred Stock" used without references to the Series C Convertible Preferred Stock means the shares of Series C Convertible Preferred Stock, and the shares of any series of Preferred Stock of the Corporation issued, authorized and designated from time to time by a resolution or resolutions of the Board of Directors, share for share alike and without distinction as to class, except as otherwise expressly provided for in this Article Fourth of this Certificate of Incorporation or as the context otherwise requires.

2. Dividends. Dividends on the Series C Convertible Preferred Stock shall be payable when, as and if declared by the Board of Directors of the Corporation. No dividends (other than dividends or distributions payable solely in shares of Common Stock of the Corporation) shall be paid, declared or set aside, and no other distribution shall be made, on or

with respect to the Common Stock of the Corporation unless and until there shall have been paid, or declared and set aside for payment dividends with respect to the Series C Convertible Preferred Stock in an amount which the holders of Series C Convertible Preferred Stock would have received if they had converted their Series C Convertible Preferred Stock into Common Stock immediately prior to the record date for such dividend or distribution.

3. Liquidation, Dissolution or Winding Up.

(a) Treatment at Liquidation, Dissolution or Winding Up. In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, or in the event of its insolvency, before any distribution or payment is made to any holders of any shares of Common Stock or any other class or series of capital stock of the Corporation designated to be junior to the Series C Convertible Preferred Stock, and subject to the liquidation rights and preferences of any class or series of Preferred Stock designated to be senior to, or on a parity with, the Series C Convertible Preferred Stock, the holders of each share of Series C Convertible Preferred Stock shall be entitled to be paid first out of the assets of the Corporation available for distribution to holders of the Corporation's capital stock of all classes whether such assets are capital, surplus or earnings, an amount (such amount, as so determined, is referred to herein as the "Series C Liquidation Preference") equal to \$1.30 per share of Series C Convertible Preferred Stock (which amount shall be subject to equitable adjustment whenever there shall occur a stock dividend, stock split, combination, reorganization, recapitalization, reclassification or other similar event involving a change in the capital structure of the Series C Convertible Preferred Stock). All shares of Preferred Stock are on a parity with the Series C Convertible Preferred Stock with respect to the Liquidation Preference.

(b) Insufficient Funds. If upon such liquidation, dissolution or winding up the assets or surplus funds of the Corporation to be distributed to the holders of shares of Series C Convertible Preferred Stock and any other then-outstanding shares of the Corporation's capital stock ranking on a parity with respect to the payments on liquidation with the Series C Convertible Preferred Stock (such shares, being referred to herein as the "Series C Parity Preferred Stock") shall be insufficient to permit payment to such holders of the full Series C Liquidation Preference and all other preferential amounts payable with respect to the Series C Convertible Preferred Stock and such Series C Parity Preferred Stock, then the assets available for payment or distribution to such holders shall be allocated among the holders of the Series C Convertible Preferred Stock and such Series C Parity Preferred Stock, pro rata, in proportion to the full respective preferential amounts to which the Series C Convertible Preferred Stock and such Series C Parity Preferred Stock are each entitled. After payment has been made to the holders of the Series C Convertible Preferred Stock and the Series C Parity Preferred Stock of the full Series C Liquidation Preference and all other preferential amounts to which such holders shall be entitled as aforesaid, the holders of Series C Convertible Preferred Stock shall not receive any further portion of the remaining assets of the Corporation available for distribution to its shareholders and all such remaining assets shall be distributed to the holders of the Common Stock, the holders of any Series C Parity Preferred Stock designated to participate with holders of Common Stock and any other class or series of capital stock of the Corporation designated to be junior to the Series C Convertible Preferred Stock.

(c) Certain Transactions Treated as Liquidation. For purposes of this Section 3, at the election of a majority of the outstanding holders of Series C Convertible Preferred Stock, (A) any acquisition of the Corporation by means of merger or other form of corporate reorganization with or into another corporation in which outstanding shares of the Corporation are exchanged for securities or other consideration issued, or caused to be issued, by the other corporation or its subsidiary, in which transaction this Corporation is not the surviving entity, and, as a result of which transaction, the shareholders of this Corporation own 50% or less of the voting power of the surviving entity (other than a mere reincorporation transaction), or (B) a sale, transfer or lease (other than a pledge or grant of a security interest to a bona fide lender) of all or substantially all of the assets of the Corporation (other than to or by a wholly-owned subsidiary of the Corporation), shall be treated as a liquidation, dissolution or winding up of the Corporation and shall entitle the holders of Series C Convertible Preferred Stock to receive at the closing of any such transactions their Series C Liquidation Preference.

(d) Distributions of Property. Whenever the distribution provided for in this Section 3 shall be payable in property other than cash, the value of such distribution shall be the fair market value of such property as determined in good faith by the Board of Directors.

4. Voting Power.

(a) General. Except as otherwise expressly provided in Section 7 hereof or as otherwise required by law, each holder of Series C Convertible Preferred Stock shall be entitled to vote on all matters and shall be entitled to that number of votes equal to the largest number of whole shares of Common Stock into which such holder's shares of Series C Convertible Preferred Stock could be converted, pursuant to the provisions of Section 5 hereof, at the record date for the determination of stockholders entitled to vote on such matter or, if no such record date is established, at the date such vote is taken or any written consent of stockholders is solicited. Except as otherwise expressly provided in Section 7 hereof or as otherwise required by law, the holders of shares of Preferred Stock and Common Stock shall vote together as a single class on all matters.

5. Conversion Rights. The holders of the Series C Convertible Preferred Stock shall have the following rights with respect to the conversion of such shares into shares of Common Stock:

(a) General. Subject to and in compliance with the provisions of this Section 5, any or all shares of the Series C Convertible Preferred Stock may, at the option of the holder thereof (except that upon any liquidation of the Corporation the right of conversion shall terminate at the close of business on the business day fixed for payment of the amounts distributable on the Series C Convertible Preferred Stock), be converted at any time into fully-paid and non-assessable shares of Common Stock. The number of shares of Common Stock to which a holder of Series C Convertible Preferred Stock shall be entitled to receive upon conversion shall be the product obtained by multiplying the Series C Applicable Conversion Rate for the Series C Convertible Preferred Stock (determined as provided in Section 5(b)) by the number of shares of Series C Convertible Preferred Stock being converted at any time.

(b) Applicable Conversion Rate. The conversion rate in effect at any time for the Series C Convertible Preferred Stock (the "Series C Applicable Conversion Rate") shall be the quotient obtained by dividing \$1.30 by Series C Applicable Conversion Value, calculated as provided in Section 5(c). Initially, the Series C Applicable Conversion Rate shall be one (1), and each share of Series C Convertible Preferred Stock shall initially be convertible into one (1) share of Common Stock.

(c) Applicable Conversion Value. The Series C Applicable Conversion Value in effect from time to time, except as adjusted in accordance with Section 5(d) hereof, shall be \$1.30 with respect to the Series C Convertible Preferred Stock (the "Series C Applicable Conversion Value").

(d) Adjustment to Applicable Conversion Value.

(i)(A) Upon Dilutive Issuances of Common Stock or Convertible Securities. If the Corporation shall, while there are any shares of Series C Convertible Preferred Stock outstanding, issue or sell shares of its Common Stock (or Common Stock Equivalents, as defined below) without consideration or at a price per share less than the Series C Applicable Conversion Value in effect immediately prior to such issuance or sale, then in each such case such Series C Applicable Conversion Value upon each such issuance or sale, except as hereinafter provided, shall be lowered so as to be equal to an amount determined by multiplying the Series C Applicable Conversion Value in effect immediately prior to such calculation by a fraction:

(1) the numerator of which shall be (a) the number of shares of Common Stock outstanding immediately prior to the issuance of such additional shares of Common Stock or Common Stock Equivalents (calculated on a fully-diluted, fully-converted basis assuming the issuance of all shares of Common Stock upon the exercise or conversion of all then exercisable Common Stock Equivalents, as defined in paragraph 5(i)(B)), plus (b) the number of shares of Common Stock which the net aggregate consideration, if any, received by the Corporation for the total number of such additional shares of Common Stock or Common Stock Equivalents so issued would purchase at the Series C Applicable Conversion Value in effect immediately prior to such issuance, and

(2) the denominator of which shall be (a) the number of shares of Common Stock outstanding immediately prior to the issuance of such additional shares of Common Stock or Common Stock Equivalents (calculated on a fully-diluted, fully-converted basis, assuming the issuance of all shares of Common Stock upon the exercise or conversion of all then exercisable Common Stock Equivalents), plus (b) the number of such additional shares of Common Stock or Common Stock Equivalents so issued.

All calculations shall be rounded to four decimal points. The provisions of this Section 5(d)(i)(A) may be waived in any instance (without the necessity of convening any meeting of stockholders of the Corporation) upon the written consent of the holders of a majority of the outstanding shares of Series C Convertible Preferred Stock.

(i)(B) Upon Other Dilutive Issuances of Warrants, Options and Purchase Rights to Common Stock or Convertible Securities.

(1) For the purposes of this Section 5(d)(i), the issuance of any warrants, options, subscription or purchase rights with respect to shares of Common Stock and the issuance of any securities convertible into or exercisable or exchangeable for shares of Common Stock, or the issuance or sale of any warrants, options, subscription or purchase rights with respect to such convertible, exercisable or exchangeable securities (collectively, "Common Stock Equivalents"), shall be deemed an issuance of Common Stock with respect to the Series C Convertible Preferred Stock if the Net Consideration Per Share (as hereinafter determined) which may be received by the Corporation for such Common Stock Equivalents shall be less than the Series C Applicable Conversion Value in effect at the time of such issuance or sale. Any obligation, agreement or undertaking to issue or sell Common Stock Equivalents at any time in the future shall be deemed to be an issuance or sale at the time such obligation, agreement or undertaking is made or arises. No adjustment of the Series C Applicable Conversion Value shall be made under this Section 5(d)(i) upon the issuance of any shares of Common Stock which are issued pursuant to the exercise, conversion or exchange of any Common Stock Equivalents if any adjustment shall previously have been made upon the issuance of any such Common Stock Equivalents as above provided.

Adjustments for Cancellation or Expiration of Common Stock Equivalents. Any adjustment of the Series C Applicable Conversion Value with respect to this paragraph which relates to Common Stock Equivalents shall be disregarded, in whole or in part, as applicable, if, as, and when all, or such portion, of such Common Stock Equivalents expire or are cancelled without being exercised, so that the Series C Applicable Conversion Value effective immediately upon such cancellation or expiration shall be equal to the Series C Applicable Conversion Value in effect at the time of the issuance of the expired or cancelled Common Stock Equivalents, with such additional adjustments as would have been made to the Series C Applicable Conversion Value had the expired or cancelled Common Stock Equivalents not been issued.

(2) Net Consideration Per Share. For purposes of this paragraph, the "Net Consideration Per Share" which may be received by the Corporation shall be determined as follows:

(a) The "Net Consideration Per Share" shall mean the amount equal to the total amount of consideration, if any, received by the Corporation for the issuance or sale of such Common Stock Equivalents, plus the minimum amount of consideration, if any, payable to the Corporation upon exercise, or conversion or exchange thereof, divided by the aggregate number of shares of Common Stock that would be issued if all such Common Stock Equivalents were exercised, exchanged or converted.

(b) The "Net Consideration Per Share" which may be received by the Corporation shall be determined in each instance as of the date of issuance or sale of Common Stock Equivalents without giving effect to any possible future upward price adjustments or rate adjustments which may be applicable with respect to such Common Stock Equivalents.

(i)(C) Stock Dividends for Holders of Capital Stock Other Than Common Stock. In the event that the Corporation shall make or issue, or shall fix a record date for the determination of holders of any capital stock of the Corporation other than holders of Common Stock entitled to receive a dividend or other distribution payable in Common Stock or securities of the Corporation convertible into, exercisable for or otherwise exchangeable for the Common Stock of the Corporation, then, for purposes of determining the Net Consideration Per Share, such Common Stock or other securities issued in payment of such dividend shall be deemed to have been issued for a consideration of \$.001, except for (i) dividends payable in shares of Common Stock payable pro rata to holders of Series C Convertible Preferred Stock and to holders of any other class of stock (whether or not paid to holders of any other class of stock) or (ii) with respect to the Series C Convertible Preferred Stock, dividends payable in shares of Series C Convertible Preferred Stock, provided, however, that holders of any shares of Series C Convertible Preferred Stock shall be entitled to receive such shares of Common Stock for which the shares of Series C Convertible Preferred Stock are then convertible.

(i)(D) Consideration Other than Cash. For purposes of this Section 5(d)(i), if a part or all of the consideration received by the Corporation in connection with the issuance of shares of the Common Stock or the issuance of any of the securities described in this Section 5(d)(i) consists of property other than cash, such consideration shall be deemed to have a fair market value as is reasonably determined in good faith by the Board of Directors of the Corporation.

(i)(E) Exceptions to Anti-dilution. This Section 5(d)(i) shall not apply under any of the circumstances which would constitute an Extraordinary Common Stock Event (as described below). Further, this Section 5(d)(i) shall not apply with respect to:

(1) the issuance or sale from time to time of shares of Common Stock or options to purchase such shares of Common Stock, issuable to directors, officers, employees and consultants of the Corporation or any subsidiary pursuant to any qualified or non-qualified stock option or purchase plan approved by the Board of Directors of the Corporation (the "Reserved Employee Shares");

(2) the issuance of shares of Common Stock upon the conversion of any shares of Series C Convertible Preferred Stock;

(3) any shares issued by the Corporation in connection with any strategic alliance, joint venture or licensing agreement where the parties to such venture are not financial investors; provided that the issuance of such shares does not exceed 15% of the total number of shares issued and outstanding (on a fully diluted and fully converted basis) of the Corporation;

(4) any shares issued pursuant to this Section 5; and

(5) any shares issued upon the exercise or conversion of an option, warrant, preferred stock, debenture or any other convertible security ("Convertible Security"), provided that the issuance of such Convertible Security was (a) subject to this Section 5(d)(i) (regardless of whether the subscriber elected to exercise such rights under this Section 5(d)(i)) or (b) exempted under this Section 5(d)(i); provided, however, that any issuance below \$1.30 per

share (subject to the Series C Applicable Conversion Rate) with respect to subsection (3) above shall not be exempted from the provisions of this Section 5(d)(i).

(d)(ii) Upon Extraordinary Common Stock Event. Upon the happening of an Extraordinary Common Stock Event (as hereinafter defined), the Series C Applicable Conversion Value (and all other conversion values set forth in Section 5(d)(i) above) shall, simultaneously with the happening of such Extraordinary Common Stock Event, be adjusted by multiplying the Series C Applicable Conversion Value by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such Extraordinary Common Stock Event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such Extraordinary Common Stock Event, and the product so obtained shall thereafter be the Series C Applicable Conversion Value. The Series C Applicable Conversion Value, as so adjusted, shall be readjusted in the same manner upon the happening of any successive Extraordinary Common Stock Event or Events.

An "Extraordinary Common Stock Event" shall mean (i) the issue of additional shares of Common Stock as a dividend or other distribution on outstanding shares of Common Stock, (ii) a subdivision of outstanding shares of Common Stock into a greater number of shares of Common Stock, (iii) a combination or reverse stock split of outstanding shares of Common Stock into a smaller number of shares of Common Stock, or (iv) a reclassification of the outstanding shares of Common Stock.

(e) Automatic Conversion Upon Initial Public Offering or Election of Preferred Stock.

(i) Mandatory Conversion of Series C Convertible Preferred Stock. Immediately upon (1) the closing of an underwritten public offering on a firm commitment basis pursuant to an effective registration statement filed pursuant to the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation in which the Corporation actually receives gross proceeds equal to or greater than \$10,000,000 (calculated before deducting underwriter's discounts and commissions but before calculation of expenses), and in which the price per share of Common Stock equals or exceeds \$2.60 (such price subject to equitable adjustment in the event of any stock dividend, stock split, combination, reorganization, recapitalization, reclassification or other similar event involving a change in the capital structure of the Corporation), or (2) the effective date of the conversion of sixty-six and two thirds percent (66 2/3%) of the then outstanding shares of Series C Convertible Preferred Stock pursuant to the approval of such holders of Series C Convertible Preferred Stock, set forth in a written notice to the Corporation, of an election to convert such Series C Convertible Preferred Stock into Common Stock then all outstanding shares of Series C Convertible Preferred Stock shall be converted automatically into the number of shares of Common Stock into which such shares of Series C Convertible Preferred Stock are then convertible pursuant to Section 5 hereof as of the effectiveness of such underwritten public offering or the stated date of approval of such holders of Series C Convertible Preferred Stock without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent.

(ii) Surrender of Certificates Upon Mandatory Conversion. Upon the occurrence of the conversion events specified in the preceding paragraph (i), the holders of the Series C Convertible Preferred Stock shall, upon notice from the Corporation, surrender the certificates representing such shares at the office of the Corporation or of its transfer agent for the Common Stock. Thereupon, there shall be issued and delivered to such holder a certificate or certificates for the number of shares of Common Stock into which the shares of Series C Convertible Preferred Stock so surrendered were convertible on the date on which such conversion occurred. The Corporation shall not be obligated to issue such certificates unless certificates evidencing the shares of Series C Convertible Preferred Stock being converted are either delivered to the Corporation or any such transfer agent, or the holder notifies the Corporation that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection therewith.

(f) Dividends. In the event the Corporation shall make or issue, or shall fix a record date for the determination of holders of Common Stock entitled to receive a dividend or other distribution (other than a distribution in liquidation or other distribution otherwise provided for herein) with respect to the Common Stock payable in (i) securities of the Corporation other than shares of Common Stock, or (ii) other assets (excluding cash dividends or distributions), then and in each such event provision shall be made so that the holders of the Series C Convertible Preferred Stock shall receive upon conversion thereof in addition to the number of shares of Common Stock receivable thereupon, the number of securities or such other assets of the Corporation which they would have received had their Series C Convertible Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the Conversion Date (as that term is hereafter defined in Section 5(j)), retained such securities or such other assets receivable by them during such period, giving application to all other adjustments called for during such period under this Section 5 with respect to the rights of the holders of the Series C Convertible Preferred Stock.

(g) Capital Reorganization or Reclassification. If the Common Stock issuable upon the conversion of the Series C Convertible Preferred Stock shall be changed into the same or different number of shares of any class or classes of capital stock, whether by capital reorganization, recapitalization, reclassification or otherwise (other than a subdivision or combination of shares or stock dividend provided for elsewhere in this Section 5, or the sale of all or substantially all of the Corporation's capital stock or assets to any other person), then and in each such event the holder of each share of Series C Convertible Preferred Stock shall have the right thereafter to convert such share into the kind and amount of shares of capital stock and other securities and property receivable upon such reorganization, recapitalization, reclassification or other change by the holders of the number of shares of Common Stock into which such shares of Series C Convertible Preferred Stock might have been converted immediately prior to such reorganization, recapitalization, reclassification or change, all subject to further adjustment as provided herein.

(h) Capital Reorganization, Merger or Sale of Assets. If at any time or from time to time there shall be a capital reorganization of the Common Stock (other than a subdivision, combination, recapitalization, reclassification or exchange of shares provided for elsewhere in this Section 5) or a merger or consolidation of the Corporation with or into another

corporation other than a merger or reorganization involving only a change in the state of incorporation of the Corporation or the acquisition by the Corporation of another business where the Corporation survives as a going concern, or the sale of all or substantially all of the Corporation's capital stock or assets to any other person, then, as a part of such reorganization, merger, or consolidation or sale, provision shall be made so that the holders of the Series C Convertible Preferred Stock shall thereafter be entitled to receive upon conversion of the Series C Convertible Preferred Stock the per share kind and amount of consideration received or receivable (including cash) upon such merger, consolidation or sale, to which such holder would have been entitled if such holder had converted its shares of Series C Convertible Preferred Stock immediately prior to such capital reorganization, merger, consolidation or sale. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 5 to the end that the provisions of this Section 5 (including adjustment of the Series C Applicable Conversion Value then in effect and the number of shares of Common Stock or other securities issuable upon conversion of such shares of Series C Convertible Preferred Stock) shall be applicable after that event in as nearly equivalent a manner as may be practicable.

(i) Certificate as to Adjustments; Notice by Corporation. In each case of an adjustment or readjustment of the Series C Applicable Conversion Rate, the Corporation at its expense will furnish each holder of Series C Convertible Preferred Stock with a certificate prepared by the Treasurer or Chief Financial Officer of the Corporation, showing such adjustment or readjustment, and stating in detail the facts upon which such adjustment or readjustment is based.

(j) Exercise of Conversion Privilege. To exercise its conversion privilege, a holder of Series C Convertible Preferred Stock shall surrender the certificate or certificates representing the shares being converted to the Corporation at its principal office, and shall give written notice to the Corporation at that office that such holder elects to convert such shares. Such notice shall also state the name or names (with address or addresses) in which the certificate or certificates for shares of Common Stock issuable upon such conversion shall be issued. The certificate or certificates for shares of Series C Convertible Preferred Stock surrendered for conversion shall be accompanied by proper assignment thereof to the Corporation or in blank. The date when such written notice is received by the Corporation, together with the certificate or certificates representing the shares of Series C Convertible Preferred Stock being converted, shall be the "Conversion Date". As promptly as practicable after the Conversion Date, the Corporation shall issue and shall deliver to the holder of the shares of Series C Convertible Preferred Stock being converted, or another person on its written order, such certificate or certificates as it may request for the number of whole shares of Common Stock issuable upon the conversion of such shares of Series C Convertible Preferred Stock in accordance with the provisions of this Section 5, and cash, as provided in Section 5(k), in respect of any fraction of a share of Common Stock issuable upon such conversion. Such conversion shall be deemed to have been effected immediately prior to the close of business on the Conversion Date, and at such time the rights of the holder as holder of the converted shares of Series C Convertible Preferred Stock shall cease and the person(s) in whose name(s) any certificate(s) for shares of Common Stock shall be issuable upon such conversion shall be deemed to have become the holder or holders of record of the shares of Common Stock represented thereby.

(k) Cash In Lieu of Fractional Shares. No fractional shares of Common Stock or scrip representing fractional shares shall be issued upon the conversion of shares of Series C Convertible Preferred Stock. Instead of any fractional shares of Common Stock which would otherwise be issuable upon conversion of Series C Convertible Preferred Stock, the Corporation shall pay to the holder of the shares of Series C Convertible Preferred Stock which were converted a cash adjustment in respect of such fractional shares in an amount equal to the same fraction of the market price per share of the Common Stock (as determined in a reasonable manner prescribed by the Board of Directors) at the close of business on the Conversion Date.

(l) Partial Conversion. In the event some but not all of the shares of Series C Convertible Preferred Stock represented by a certificate(s) surrendered by a holder are converted, the Corporation shall execute and deliver to or on the order of the holder, at the expense of the Corporation, a new certificate representing the number of shares of Series C Convertible Preferred Stock which were not converted.

(m) Reservation of Common Stock. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purpose of effecting the conversion of the shares of the Series C Convertible Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of the Series C Convertible Preferred Stock (including any shares of Series C Convertible Preferred Stock represented by any warrants, options, subscription or purchase rights for Series C Convertible Preferred Stock), and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Series C Convertible Preferred Stock (including any shares of Series C Convertible Preferred Stock represented by any warrants, options, subscriptions or purchase rights for such Preferred Stock), the Corporation shall take such action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

(n) No Reissuance of Preferred Stock. No share or shares of Series C Convertible Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be cancelled, retired and eliminated from the shares which the Corporation shall be authorized to issue. The Corporation shall from time to time take such appropriate corporate action as may be necessary to reduce the authorized number of shares of the Series C Convertible Preferred Stock.

6. Redemption. The Series C Convertible Preferred Stock is not redeemable.

7. Restrictions and Limitations.

(a) Corporate Action; Amendment. At any time when shares of Series C Convertible Preferred Stock are outstanding, except where the vote or written consent of the holders of a greater number of shares of the Corporation is required by law or this Certificate of Incorporation, and in addition to any other vote required by law, without the written consent of the holders of at least a majority of the then outstanding Series C Convertible Preferred Stock (with each share being entitled to one vote) given in writing or by vote at a meeting consenting or voting (as applicable) separately as a series, the Corporation will not amend its Certificate of

Incorporation or by-laws if such amendment would materially adversely affect any of the rights, preferences, privileges of or limitations provided for herein of any shares of Series C Convertible Preferred Stock. Without limiting the generality of the foregoing, the Corporation will not amend its Certificate of Incorporation or by-laws without the approval of at least a majority of the then outstanding shares of Series C Convertible Preferred Stock to:

(i) cause the Corporation to redeem, repurchase or otherwise acquire for value (or pay into or set aside for a sinking fund for such purpose), any share or shares of Common Stock other than a redemption, repurchase or other acquisition for cash of unvested shares under the forfeiture provisions of the Corporation's stock option, restricted stock or other equity compensation plans or agreements or any shares of Series C Convertible Preferred Stock which is offered pro rata to all holders thereof; or

(ii) authorize or issue, or obligate the Corporation to authorize or issue, additional shares of Preferred Stock senior to the Series C Convertible Preferred Stock with respect to liquidation preferences, dividend rights, voting rights or redemption rights; or

(iii) increase or decrease (except retirement following conversion) the authorized number of shares of Series C Convertible Preferred Stock or reissue shares of Series C Convertible Preferred Stock previously converted; or

(iv) adversely affect the liquidation preferences, dividend right or voting rights of the holders of Series C Convertible Preferred Stock; or

(v) pay any dividends on the Common Stock at a time when any shares of Series C Convertible Preferred Stock is still outstanding.

8. No Dilution or Impairment. The Corporation will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of capital stock or assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of the Series C Convertible Preferred Stock set forth herein, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such action as may be necessary or appropriate in order to protect the rights of the holders of the Series C Convertible Preferred Stock against dilution or other impairment.

9. Notices of Record Date. In the event of:

(a) any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of capital stock of any class or any other securities or property, or to receive any other right, or

(b) any capital reorganization of the Corporation, any reclassification or recapitalization of the capital stock of the Corporation, any merger or consolidation of the Corporation, or any transfer of all or substantially all of the assets of the Corporation to any other corporation, or any other entity or person, or

(c) any voluntary or involuntary dissolution, liquidation or winding up of the Corporation,

then and in each such event the Corporation shall mail or cause to be mailed to each holder of Series C Convertible Preferred Stock a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right and a description of such dividend, distribution or right, (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding up is expected to become effective, and (iii) the time, if any, that is to be fixed, as to when the holders of record of Common Stock (or other securities) shall be entitled to exchange their shares of Common Stock (or other securities) for securities or other property deliverable upon such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding up. Such notice shall be mailed by first class mail, postage prepaid, at least one (1) days prior to the date specified in such notice on which such action is to be taken.

10. Issue Tax. The issuance of certificates for shares of Common Stock upon conversion of Series C Convertible Preferred Stock shall be made without charge to the holders thereof for any issuance tax in respect thereof, provided that the Corporation shall not be required to pay any tax in respect of any transfer involved in the issuance and delivery of any certificate in a name other than that of the holder of the Series C Convertible Preferred Stock that is being converted.

FIFTH. The name and business address of the sole incorporator are Gregory L. White, Esq., c/o Chappell White LLP, 268 Summer Street, Boston, Massachusetts 02210.

SIXTH. In furtherance of, and not in limitation of, powers conferred by statute, it is further provided:

A. The Board of Directors is expressly authorized to adopt, amend or repeal the By-laws of the Corporation.

B. Election of directors need not be by written ballot unless the By-laws of the Corporation shall so provide.

C. The books and records of the Corporation may be kept at such place within or without the State of Delaware as the By-laws of the Corporation may provide or as may be designated from time to time by the Board of Directors.

SEVENTH. Whenever a compromise or arrangement is proposed between the Corporation and its creditors or any class of them and/or between this corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of the Corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for the Corporation under the provisions of section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for the Corporation under the provisions of section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, to be summoned in such manner as the said court directs. If a

majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of the Corporation as consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of the Corporation, as the case may be, and also on the Corporation.

EIGHTH. Except to the extent that the General Corporation Law of the State of Delaware prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director of the Corporation for or with respect to any acts or omissions of such director occurring prior to such amendment.

NINTH. 1. Actions, Suits and Proceedings Other than by or in the Right of the Corporation. The Corporation shall indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation), by reason of the fact that he is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all costs, charges and expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom, if he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which he reasonably believed to be in, or not opposed to, the best interests of the Corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful. Notwithstanding anything to the contrary in this Article, except as set forth in Section 6 below, the Corporation shall not indemnify an Indemnitee seeking indemnification in connection with a proceeding (or part thereof) initiated by the Indemnitee unless the initiation thereof was approved by the Board of Directors of the Corporation.

2. Actions or Suits by or in the Right of the Corporation. The Corporation shall indemnify any Indemnitee who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgment in its favor by reason of the fact that he is or was, or has agreed to become, a director or officer of the Corporation, or is or was serving, or has agreed to serve, at the request of the Corporation, as a director, officer or trustee of, or in a similar capacity with, another corporation,

partnership, joint venture, trust or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all costs, charges and expenses (including attorneys' fees) and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom, if he acted in good faith and in a manner he reasonably believed to be in, or not opposed to, the best interests of the Corporation, except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the Corporation unless and only to the extent that the Court of Chancery of Delaware or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of such liability but in view of all the circumstances of the case, such person is fairly and unreasonably entitled to indemnity for such costs, charges and expenses (including attorneys' fees) which the Court of Chancery of Delaware or such other court shall deem proper.

3. Indemnification for Costs, Charges and Expenses of Successful Party.

Notwithstanding the other provisions of this Article, to the extent that an Indemnitee has been successful, on the merits or otherwise, in defense of any action, suit or proceeding referred to in Sections 1 and 2 of this Article, or in defense of any claim, issue or matter therein, or on appeal from any such action, suit or proceeding, he shall be indemnified against all costs, charges and expenses (including attorneys' fees) actually and reasonably incurred by him or on his behalf in connection therewith.

4. Notification and Defense of Claim. As a condition precedent to his right to be indemnified, the Indemnitee must notify the Corporation in writing as soon as practicable of any action, suit, proceeding or investigation involving him for which indemnity will or could be sought. With respect to any action, suit, proceeding or investigation of which the Corporation is so notified, the Corporation will be entitled to participate therein at its own expense and/or to assume the defense thereof at its own expense, with legal counsel reasonably acceptable to such Indemnitee. After notice from the Corporation to the Indemnitee of its election so to assume such defense, the Corporation shall not be liable to the Indemnitee for any legal or other expenses subsequently incurred by the Indemnitee in connection with such claim, other than as provided below in this Section 4. The Indemnitee shall have the right to employ his own counsel in connection with such claim, but the fees and expenses of such counsel incurred after notice from the Corporation of its assumption of the defense thereof shall be at the expense of the Indemnitee unless (i) the employment of counsel by the Indemnitee has been authorized by the Corporation, (ii) counsel to the Indemnitee shall have reasonably concluded that there may be conflict of interest or position on any significant issue between the Corporation and the Indemnitee in the conduct of the defense of such action or (iii) the Corporation shall not in fact have employed counsel to assume the defense of such action, in each of which cases the fees and expenses of counsel for the Indemnitee shall be at the expense of the Corporation, except as otherwise expressly provided by this Article. The Corporation shall not be entitled to assume the defense of any claim brought by or in the right of the Corporation or as to which counsel for the Indemnitee shall have reasonably made the conclusion provided for in clause (ii) above.

5. Advance of Costs, Charges and Expenses. Subject to the provisions of Section 6 below, in the event that the Corporation does not assume the defense pursuant to Section 4 of this Article of any action, suit, proceeding or investigation of which the Corporation receives notice under this Article, any costs, charges and expenses (including attorneys' fees) incurred by an

Indemnitee in defending a civil or criminal action, suit, proceeding or investigation or any appeal therefrom shall be paid by the Corporation in advance of the final disposition of such matter, provided, however, that the payment of such costs, charges and expenses incurred by an Indemnitee in advance of the final disposition of such matter shall be made only upon receipt of an undertaking by or on behalf of the Indemnitee to repay all amounts so advanced in the event that it shall ultimately be determined that such Indemnitee is not entitled to be indemnified by the Corporation as authorized in this Article.

6. Procedure for Indemnification. Any indemnification or advancement of expenses pursuant to Section 1, 2, 3 or 5 of this Article shall be made promptly, and in any event within 60 days after receipt by the Corporation of the written request of the Indemnitee, unless with respect to requests under Section 1, 2 or 5 of the Corporation determines within such 60-day period that such Indemnitee did not meet the applicable standard of conduct set forth in Section 1 or 2, as the case may be. Such determination shall be made in each instance by (a) a majority vote of a quorum of the directors of the Corporation consisting of persons who are not at that time parties to the action, suit or proceeding in question ("disinterested directors"), (b) if no such quorum is obtainable, a majority vote of a committee of two or more disinterested directors, (c) a majority vote of a quorum of the outstanding shares of stock of all classes entitled to vote for directors, voting as a single class, which quorum shall consist of stockholders who are not at that time parties to the action, suit or proceeding in question, (d) independent legal counsel (who may be regular legal counsel to the Corporation) appointed for such purpose by vote of the directors in the manner specified in clause (a) or (b) above, or (e) a court of competent jurisdiction. The right to indemnification or advances as granted by this Article shall be enforceable by the Indemnitee in any court of competent jurisdiction if the Corporation denies such request, in whole or in part, or if no disposition thereof is made within the 60-day period referred to above. Such Indemnitee's costs, charges and expenses (including attorneys' fees) incurred in connection with successfully establishing his right to indemnification, in whole or in part, in any such proceeding shall also be indemnified by the Corporation. Unless otherwise provided by law, the burden of proving that the Indemnitee is not entitled to indemnification or advancement of expenses under this Article shall be on the Corporation.

7. Subsequent Amendment. No amendment, termination or repeal of this Article or of the relevant provisions of the Delaware General Corporation Law or any other applicable laws shall affect or diminish in any way the rights of any Indemnitee to indemnification under the provisions hereof with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the final adoption of such amendment, termination or repeal.

8. Other Rights. The indemnification and advancement of expenses provided by this Article shall not be deemed exclusive of any other rights to which an Indemnitee seeking indemnification or advancement of expenses may be entitled under any law (common or statutory), agreement or vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in any other capacity while holding office for the Corporation, and shall continue as to an Indemnitee who has ceased to be a director or officer, and shall inure to the benefit of the estate, heirs, executors and administrators of such Indemnitee. Nothing contained in this Article shall be deemed to prohibit, and the Corporation is specifically authorized to enter into, agreements with officers and directors providing

indemnification rights and procedures different from those set forth in this Article. In addition, the Corporation may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to other employees or agents of the Corporation or other persons serving the Corporation and such rights may be equivalent to, or greater or less than, those set forth in this Article.

9. Partial Indemnification. If an Indemnitee is entitled under any provision of this Article to indemnification by the Corporation for some or a portion of the costs, charges and expenses (including attorneys' fees), judgments, fines or amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with any action, suit, proceeding or investigation and any appeal therefrom but not, however, for the total amount thereof, the Corporation shall nevertheless indemnify the Indemnitee for the portion of such costs, charges and expenses (including attorneys' fees), judgments, fines or amounts paid in settlement to which such Indemnitee is entitled.

10. Insurance. The Corporation may purchase and maintain insurance, at its expense, to protect itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other enterprise against any expense, liability or loss incurred by him in any such capacity, or arising out of his status as such, whether or not the Corporation would have the power to indemnify such person against such expense, liability or loss under the Delaware General Corporation Law.

11. Merger or Consolidation. If the Corporation is merged into or consolidated with another corporation and the Corporation is not the surviving corporation, the surviving corporation shall assume the obligations of the Corporation under this Article with respect to any action, suit, proceeding or investigation arising out of or relating to any actions, transactions or facts occurring prior to the date of such merger or consolidation.

12. Savings Clause. If this Article or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each Indemnitee as to any costs, charges and expenses (including attorneys' fees), judgments, fines and amounts paid in settlement in connection with any action, suit, proceeding or investigation, whether civil, criminal or administrative, including an action by or in the right of the Corporation, to the fullest extent permitted by any applicable portion of this Article that shall not have been invalidated and to the fullest extent permitted by applicable law.

13. Definitions. Terms used herein and defined in Section 145(h) and Section 145(i) of the Delaware General Corporation Law shall have the respective meanings assigned to such terms in such Section 145(h) and Section 145(i).

14. Subsequent Legislation. If the Delaware General Corporation Law is amended after adoption of this Article to expand further the indemnification permitted to Indemnitees, then the Corporation shall indemnify such persons to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

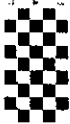
TENTH. The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter

prescribed by statute and this Certificate of Incorporation (as it may, from time to time, be amended, altered or changed), and all rights conferred upon stockholders herein are granted subject to this reservation.

IN WITNESS WHEREOF, the undersigned sole incorporator has executed this Certificate of Incorporation this 20 day of January, 2000.



Gregory L. White
Sole Incorporator



CHAPPELL WHITE LLP

COUNSELLORS AT LAW
268 SUMMER STREET
BOSTON, MASSACHUSETTS 02210

TELEPHONE (617) 772-9600
FACSIMILE (617) 772-9696
E-MAIL: lwfirm@chappellwhite.com

FACSIMILE COVER SHEET

DATE: January 20, 2000 **TIME:** 2:00 PM
FROM: Maureen T. Golden
TO: Ms. Jane Krayner **PHONE NO.:** 302-739-3073
Corporations Division **FAX NO.:** 302-636-5454
Secy. of State's Office-Delaware

MESSAGE/COMMENTS/INSTRUCTIONS:

Re: Order No. 559004, Placed by Susan @ CSC Corporation
Entity to be Incorporated: ServiSense.com, Inc.
Name Registration No. 3155044, Due to Expire: 2/5/00

The name was reserved by our client, TelEnergy, Incorporated.

This filing is being done by CSC Corporation, which is serving as Registered Agent for ServiSense.com, Inc.

We represent TelEnergy, Incorporated and ServiSense.com, Inc.

As Susan from CSC has indicated, we need this filing to have today's date. PLEASE CONTACT ME IF YOU DO NOT RECEIVE THIS ENTIRE FAX TRANSMISSION.

We are sending a total of 38 pages, including this cover sheet. We are transmitting on a XEROX WORK CENTRE PRO 657. If you do not receive all of these pages or if there is any difficulty in transmission, please call (617) 772-9600 and ask for the fax operator.

-----Account No. 9999-000 (TelEnergy)-----

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL TO WHOM IT IS ADDRESSED, AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THIS ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE UNITED STATES POSTAL SERVICE. THANK YOU.

CHAPPELL WHITE LLP

COUNSELLORS AT LAW
268 SUMMER STREET
BOSTON, MASSACHUSETTS 02210

TELEPHONE (617) 772-9600

FACSIMILE (617) 772-9696

E-MAIL: lawfirm@chappellwhite.com

January 20, 2000

Delaware Secretary of State
Corporations Division

RE: ServiSense.com, Inc.

Dear Sir or Madam:

We represent ServiSense.com, Inc. and its affiliate TelEnergy, Incorporated and are authorized to file on their behalf. We are filing a Certificate of Incorporation on behalf of ServiSense.com, Inc. The company has reserved the name "ServiSense.com, Inc." in Delaware with registration number 3155044, due to expire February 5, 2000.

If you have any questions, please do not hesitate to call me at the above number.

Sincerely yours,



Mark A. Katzoff, Esq.

CERTIFICATE OF MERGER

OF

TELEENERGY, INCORPORATED
(A MASSACHUSETTS CORPORATION)

INTO

SERVISENSE.COM, INC.
(A DELAWARE CORPORATION)

* * * * *

It is hereby certified that:

1. The constituent business corporations participating in the merger herein certified are:

- (i) TelEnergy, Incorporated, which is incorporated under the laws of the Commonwealth of Massachusetts; and
- (ii) ServiSense.com, Inc., which is incorporated under the laws of the State of Delaware.

2. A Plan and Agreement of Merger has been approved, adopted, certified, executed and acknowledged by each of the aforesaid constituent entities in accordance with the provisions of subsection (c) of Section 252 of the General Corporation Law of the State of Delaware, by TelEnergy, Incorporated in accordance with Section 79 of Chapter 156B of the Massachusetts General Laws of the Commonwealth of Massachusetts and by ServiSense.com, Inc in the same manner as is provided in Section 252 of the General Corporation Law of the State of Delaware.

3. The name of the surviving corporation in the merger herein certified is ServiSense.com, Inc., which will continue its existence as said surviving corporation until amended and changed pursuant to the provisions of the General Corporation Law of the State of Delaware.

4. The Certificate of Incorporation of ServiSense.com, Inc., as now in force and effect, shall continue to be the Certificate of Incorporation of said surviving corporation until amended and changed pursuant to the provisions of the General Corporation Law of the State of Delaware.

5. The executed Plan and Agreement of Merger between the aforesaid constituent entities is on file at the principal place of business of the aforesaid surviving corporation, the address of which is as follows:

180 Wells Avenue, Newton, MA 02459

6. A copy of the aforesaid Plan and Agreement of Merger will be furnished by the aforesaid surviving corporation, on request and without cost, to any shareholder of each of the aforesaid constituent entities.

7. The authorized capital stock of TelEnergy, Incorporated, the only constituent corporation which is not a Delaware corporation, is 500,000 shares of common stock, no par value, and 100,000 shares of preferred stock, no par value, of which 25,000 shares have been designated Series A Convertible Preferred Stock, 30,000 shares have been designated Series B Convertible Preferred Stock, 25,000 shares have been designated Series C Convertible Preferred Stock, 12,695 shares have been designated Series CC Convertible Preferred Stock, and 7,052 shares have been designated Series CCC Convertible Preferred Stock.

8. The Plan and Agreement of Merger between the aforesaid constituent corporations provides that the Merger herein certified shall become effective on the date and at the time when this Certificate of Merger is filed with the Secretary of State of the State of Delaware.

[REMAINDER OF PAGE DELIBERATELY LEFT BLANK]

Dated: February 22, 2000

SERVISENSE.COM, INC.

By: 
Christopher J. McKeown, President

Dated: February 22, 2000

TELEENERGY, INCORPORATED.

By: 
Christopher J. McKeown, President